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**CC:** ORD-Exec-Council-Directors [Execcouncildirectors@epa.gov]  
**Subject:** Close out of FY2017 - Congratulations and thanks for a great year!

With the close of FY17, I want to pause for a moment to recognize and congratulate all of you for NERL's accomplishments over the past year.

Fiscal Year 2017 was another notable year of research excellence for our Lab. There are many challenges to overcome when implementing any research project, but conducting research in an EPA laboratory can have its own challenges due to the high interest and importance of our work. NERL scientists more than met these challenges supporting our EPA Program and Regional partners, States, and local communities while advancing exposure science. By the close of FY17, NERL will have delivered 55 outputs and products and over 300 publications (articles, reports, and book chapters).

The following are a few examples of NERL's support to our Agency partners.

- In support of new **TSCA** regulations, NERL provided the Office of Pollution Prevention and Toxics (OPPT) with high-throughput exposure tools and exposure estimates for the pre-prioritization of chemicals under the Frank R. Lautenberg Chemical Safety for the 21st Century Act.
- NERL staff contributed to a **multimedia, aggregate lead (Pb) exposure analysis**, including model evaluation, source apportionment, and sensitivity analysis. The primary objective was to determine what drinking water Pb concentrations keep children's blood lead levels (BLLs) below specified values, considering exposures from water, soil, dust, food, and air.
- Working with EPA Regions 2, 4, 6, 7, and 9, NERL scientists provided an evaluation of **air sensor technology** performance, including the evaluation of a sensor system prototype developed by the United Nations Environment Programme.
- NERL scientists provided support to Office of Water (OW) by contributing to the review of the **2012 Recreational Water Quality Criteria**.

NERL scientists provided support to States and local communities including helping EPA respond to issues of national concern as demonstrated by the following examples.

- **Tire Crumb** work continued with release of the interim report and public release of a literature review as a part of the multi-agency Crumb Rubber Federal Research Action Plan group.
- The **Gold King Mine Final Report** was released describing NERL's research results on water quality effects from the Gold King Mine release. Modeling of the release and resulting river flows was an unplanned but substantial effort that has earned accolades from many parts of the Agency, States and Tribes.
- NERL was instrumental in providing technical assistance to North Carolina, New Jersey, New Hampshire, and Maine in response to concerns about **exposures to per- and polyfluorinated compounds PFCs**. The analysis of water, sediment, and soil samples help to inform the States on exposure and risk, and provided a scientific basis for setting public health priorities.
- The **Village Green** project continues to garnish interest both within the US and internationally, and has been selected for numerous awards for innovation and support to the public sector. Meanwhile, Village Green's counterpart, **Village Blue**, began streaming live water sensor data on the USGS National Water Information System website. The Village Blue Project provides real-time monitoring data to the Baltimore community to increase public awareness about local water quality in Baltimore Harbor and Chesapeake Bay.
- Using the **Cyanobacteria Assessment Network (CyAN)**, a system to access satellite imagery, the State of Utah Department of Environmental Quality (DEQ) detected a bloom in Utah Lake and issued an advisory warning the public and pets to stay out of the lake's Provo Bay.
- NERL was an integral part of the **Lake Michigan Ozone Study (LMOS)**. This multi-agency field study was initiated by the Lake Michigan Air Directors Consortium (LADCO) to collect ground-based, ship-based, and aircraft-based

measurements of chemical species over Lake Michigan to better understand ozone chemistry and transport over the Lake Michigan lakeshore.

NERL scientists also released and enhanced a variety of exposure science tools including:

- The web-based tool **Materials Management Wizard (MWiz)** was released. MWIZ contains a repository of EPA-sourced materials management resources to help users make informed decisions on sustainable management practices and approaches.
- Version 5.2 of the **Community Multiscale Air Quality (CMAQ)** modeling system was released enhancing the tools available to States and EPA's Program Offices for implementation of the National Ambient Air Quality Standards (NAAQS) and other air-quality management rulemakings.
- Enhancements to the popular **EnviroAtlas** continue to be made. New layers were incorporated to identify where markets for watershed services, forest carbon, wetlands, and imperiled species and habitats occur in the U.S. In addition, a number of webinars and live demonstrations were conducted for EnviroAtlas users.
- Release of the **Risk Informed Materials Management (RIMM)** tool.
- Release of **Consumer And Products Database (CPDat)**.

As you know, facilities consolidation and construction efforts are impacting our locations in Athens, Las Vegas, RTP, and Cincinnati. Significant progress continues to be made while working on a tight timeline. A special thank you to all those helping to move the process forward, and to all of those being impacted for your patience. I recognize that for many of you, the impact goes beyond professional to personal and we will support you in every way that we can.

I also want to recognize three especially significant awards made to NERL staff by others outside of NERL.

- **Dr. Blake Schaeffer** was awarded the Arthur S. Flemming Award for leading the collaborative research partnership between EPA, NASA, NOAA, and USGS to create the Cyanobacteria Assessment Network (CyAN). The prestigious Arthur S. Flemming Award recognizes outstanding and meritorious achievement in working for the federal government.
- **Dr. Havala Pye** was presented the Presidential Early Career Award. This award is the highest U.S. Government honor for science and engineering professionals in the early stages of their independent research careers.
- **Ron Williams and Kelly Witter** were awarded EPA's Gold Metal for exceptional service for their contributions to the Village Green Project.

In addition, Brian Eder, a co-author on one of two papers that was recognized by Atmospheric Environment as outstanding papers for 2016, and Mark Strynar and Andy Lindstrom were co-authors on one of four papers recognized by Environmental Science and Technology as best papers of 2016. Well done!

It's important to remember that all of NERL's research accomplishments are possible, in part, because of a dedicated scientific and administrative professional staff performing and supporting research activities. Thank you to everyone who contributed to committing over 99 percent of NERL's FY17 financial resources and "keeping the trains running on schedule." Also noteworthy are the leadership and hard work provided by NERL's 16 Project Leads and 67 Task Leads. We realize that these leadership roles are crucial to the success of our research.

In closing, as I transition to my role in the ORD Immediate Office, I want to take this opportunity to personally thank each of you for your support, both retrospectively and prospectively. Have a great FY18! I have every confidence that all of you will continue to thrive while my focus moves to ensuring the Agency understands and values ORD and our essential role in supporting the Agency's mission.

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